CLAIM AMENDMENTS

Amend claims:1,2,4,5,7,8,11,13-16. Cancelled claim 17 and 18.

- 1. (Currently Amended) A system for sealing a space in a wellbore formed in an earth formation, comprising a swelleable body arranged in the wellbore in a manner so as to seal said space upon swelling of the swelleable body, the swelleable body being susceptible of being in contact with formation water flowing into the wellbore, the swelleable body comprising including a polymer matrix material provided with a compound soluble in said formation water, wherein the matrix material substantially prevents or restricts migration of the compound out of the swelleable body and allows migration of said formation water into the swelleable body by osmosis so as to induce swelling of the swelleable body upon migration of said formation water into the swelleable body, wherein characterized in that the polymer matrix material is obtained or obtainable by mixing the compound in a mass of polymer material and thereafter vulcanizing the mass of polymer material to form said polymer matrix material.
- 2. (Currently Amended) The system of claim 1, wherein said matrix material is substantially impermeable to said compound or to ions of said compound.
- 3. (Original) The system of claim 1, wherein the polymer matrix material is an elastomer matrix material.
- 4. (Currently Amended) The system of claim 3, wherein the elastomer matrix material comprises includes a rubber selected from NBR, HNBR, XNBR, FKM, FFKM, TFE/P and or EPDM base rubber.
- 5. (Currently Amended) The system of any one of claims 1[[-4]], wherein the compound is present in the matrix material in the form of a plurality of particles dispersed in the matrix material.

- 6. (Original) The system of claim 5, wherein the particles are substantially uniformly dispersed in the matrix material.
- 7. (Currently Amended) The system of claim 5 or 6, wherein the particles are embedded in the matrix material.
- 8. (Currently Amended) The system of any one of claims 1[[-7]], wherein said compound comprises a salt, for example a dissociating salt.
- 9. (Original) The system of claim 8, wherein the salt is one of the group of acetates (M-CH₃COO), bicarbonates (M-HCO₃), carbonates (M-CO₃), formates (M-HCO₂), halides $(M_X-H_y)(H=Cl, Br or I)$, hydrosulphides (M-HS), hydroxides (M-OH), imides (M-NH), nitrates (M-NO₃), nitrides (M-N), nitrites (M-NO₂), phosphates (M-PO₄), sulphides (M-S) and sulphates (M-SO₄), where M is a metal selected from the group of metals of the periodic table.
- 10. (Currently Amended) The system of claim 8 [[or 9]], wherein the swelleable body contains at least 20 wt% salt based on the combined weight of the matrix material and the salt, preferably at least 35 wt% salt based on the combined weight of the matrix material and the salt.
- 11. (Currently Amended) The system of any one of claims 1[[-10]], wherein said space is an annular space formed between a tubular element extending into the wellbore and a substantially cylindrical wall surrounding the tubular element,
- 12. (Original) The system of claim 11, wherein said tubular element is a wellbore casing or wellbore liner, and said substantially cylindrical wall is the wellbore wall.
- 13. (Currently Amended) The system of claim 11 [[or 12]], wherein the swelleable body is formed by one or more rings, each ring extending around the tubular element.

- 14. (Currently Amended) The system of any one of claims 1[[-13]], wherein the swelleable body is arranged in a portion of the wellbore opposite an earth formation layer containing said formation water.
- 15. (Currently Amended) The system of any one of claims 1[[-14]], wherein the formation water is saline formation water.
- 16. (Currently Amended) A method of sealing a space in a wellbore formed in an earth formation, comprising arranging a swelleable body in the wellbore in a manner so as to seal said space upon swelling of the swelleable body, the swelleable body being susceptible to of being in contact with formation water flowing into the wellbore, the swelleable body comprising including a polymer matrix material provided with a compound soluble in said formation water, wherein the matrix material substantially prevents or restricts migration of the compound out of the swelleable body and allows migration of said formation water into the swelleable body by osmosis so as to induce swelling of the swelleable body upon migration of said formation water into the swelleable body, wherein characterized in that the polymer matrix material is obtained by mixing the compound in a mass of polymer material and thereafter vulcanizing the mass of polymer material to form said polymer matrix material.
- 17. (Original) The method of claim 16, wherein the compound is mixed in the mass of polymer material in the form of a plurality of particles of the compound.
- 18. (Cancelled)
- 19. Cancelled)